

REMARKS

Applicants respectfully request reconsideration of the present Application in view of the reasons that follow. Claims 1-3 and 7-22 have been rejected by the Examiner. No claims have been amended. No claims have been added. No claims have been cancelled. Accordingly, Claims 1-3 and 7-22 are pending in the present Application.

A detailed listing of all claims that are, or were, in the Application, irrespective of whether the claim(s) remain under examination in the Application, is presented, with an appropriate defined status identifier.

For simplicity and clarity purposes in responding to the Office Action, Applicants' remarks are primarily focused on the rejections of the independent claims (i.e., Claims 1, 8, and 16) outlined in the Office Action, with the understanding that the dependent claims that depend from the independent claims are patentable for at least the same reasons (and other reasons) that the independent claims are patentable. Applicants expressly reserve the right to argue the patentability of the dependent claims separately in any future proceedings.

35 U.S.C. § 103 Rejections

On pages 4-10 of the Office Action, Claims 1-3 and 7-22 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Application No. 2003/0198206 to Cain et. al. (hereinafter "Cain") in view of U.S. Patent Application No. 2002/0085503 to Hulyalkar et al. (hereinafter "Hulyalkar") and/or U.S. Patent Application No. 2004/0203820 to Billhartz (hereinafter "Billhartz"). Applicants respectfully traverse the rejections and respectfully submit that the rejections should be withdrawn, because the cited references fail to disclose, teach, or suggest the subject matter of Claims 1-3 and 7-22.

Legal Standard – 35 U.S.C. § 103

On pages 4-10 of the Final Office Action, Claims 1-3 and 7-22 were rejected under 35 U.S.C. §103(a). 35 U.S.C. § 103(a) states:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Obviousness under 35 U.S.C. §103(a) is a legal conclusion involving four factual inquiries:

- (1) the scope and content of the prior art;
- (2) the differences between the claims and the prior art;
- (3) the level of ordinary skill in the pertinent art; and
- (4) secondary considerations, if any, of nonobviousness.

See Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966). See also KSR Int'l Co. v. Teleflex Inc., 127 S.Ct. 1727, 1734, 82 USPQ2d 1385, 1391 (2007) (“While the sequence of these questions might be reordered in any particular case, the [Graham] factors continue to define the inquiry that controls.”).

In rejecting claims under 35 U.S.C. § 103, the Examiner bears the initial burden of presenting a *prima facie* case of obviousness. See In re Rijckaert, 9 F.3d 1531, 1532, 28 USPQ2d 1955,1956 (Fed. Cir. 1993). A *prima facie* case of obviousness is established by presenting evidence that would have led one of ordinary skill in the art to combine the relevant teachings of the references to arrive at the claimed invention. See In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988) and In re Lintner, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972). Further, the Examiner must provide references that comply with the all

claim limitations standard. A broad conclusory statement regarding the obviousness of modifying a reference, standing alone, is not “evidence.” Thus, when an Examiner relies on general knowledge to negate patentability, that knowledge must be articulated and placed on the record. See In re Lee, 277 F.3d 1338, 1342-45, 61 USPQ2d 1430, 1433-35 (Fed. Cir. 2002). See also In re Dembiczak, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999).

Recently, in KSR Int’l v. Teleflex, the Supreme Court rejected a rigid approach to the question of obviousness. 550 U.S. 398, 127 S.Ct. 1727, 1738 (2007). At the same time, however, the Supreme Court recognized that, “inventions in most, if not all, instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known.” *Id.* at 1741. Thus, a patent composed of several elements “is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art.” *Id.* Therefore, there must be an articulated reasoning with a rational underpinning to support a legal conclusion of obviousness. *Id.* (“[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.”) (quoting In re Kahn, 441 F.3d 977, 988 (Fed. Cir. 2006)).

Independent Claim 1

As stated in the 35 U.S.C. § 103 legal standard section, the Examiner must comply with the all claim limitations standard to establish a *prima facie* basis to deny patentability to the claimed invention under 35 U.S.C. § 103.

Independent Claim 1 includes the limitations of “combin[ing] the congestion metric information generated by the plurality of transceiver nodes into a congestion report,” “combin[ing] routing information for each transceiver node and the congestion report into a plurality of node routing and congestion reports, [and] transmit[ting] one of the plurality of node routing and congestion reports to each transceiver node based on the routing information.”

With regard to the combined node routing and congestion reports limitations of independent Claim 1 listed above, the Examiner relies upon Hulyalkar and cites various sections (e.g., paras. [0009], [0010], [0026-0030], and [0033-0038]) of Hulyalkar in support of this reliance. The Applicants have examined these sections of Hulyalkar (and Hulyalkar in general), along with the Examiner's arguments, and respectfully disagree with the Examiner's position with respect to Hulyalkar.

Independent Claim 1 is materially different than the Hulyalkar reference. As an example, the Examiner cites paragraph [0028] of Hulyalkar for the position that Hulyalkar discloses the combined node routing and congestion reports limitations of Claim 1. The Examiner stated:

Cain fails to mention ‘a route management module configured to combine the congestion metric information generated by the plurality of transceiver nodes into a congestion report; the route management module configured to combine routing information for each transceiver node and the congestion report into a plurality of node routing and congestion reports, the route management module is configured to transmit one of the plurality of node routing and congestion reports to each transceiver node based on the routing information’; the data cell includes ‘routing information’ and wherein the congestion metric information is base on comparing cell counts against a total capacity of each link, a monitoring signal of a processor buffer availability, and a monitoring signal of priority queues capacity’.

However, Hulyalkar, which is an analogous art teaches, a route management module configured to combine the congestion metric information generated by the plurality of transceiver nodes into a congestion report; the route management module configured to combine routing information for each transceiver node and the congestion report into a plurality of node routing and congestion reports, the route management module is configured to transmit one of the plurality of node routing and congestion reports to each transceiver node based on the routing information’; the data cell includes ‘routing information’ (= each station maintains local database of results of quality assessment for each path to each other station; the organization of network quality assessment measurement as a matrix; and the matrix includes transmitting

stations and receiving stations identifiers and reported quality assessment, see Pars. [0009-0010, 0026-30 and 00337-38]. (Office Action dated February 12, 2009, pages 5-6).

However, these sections of Hulyalkar (and Hulyalkar in general) do not disclose, teach, or suggest “combin[ing] routing information for each transceiver node and the congestion report into a plurality of node routing and congestion reports, [and] transmit[ing] one of the plurality of node routing and congestion reports to each transceiver node based on the routing information.”

As stated in paragraph [0028] of Hulyalkar cited by the Examiner, the Hulyalkar reference discloses “[e]ach station will maintain in its local data base 360, a quality assessment for each path to each other station. For example, station 1 will maintain the quality assessments for paths 2-1, 3-1, 4-1, etc.” In other words, station 1 maintains a quality assessment for any direct inbound link from another station but does not have any data regarding the quality assessment for paths 1-2, 1-3, 1-4, 2-3, 2-4, 2-5, 3-4, etc. **The Applicants respectfully submit that an examination of Figure 5 of Hulyalkar shows that each station only has quality assessment data for the inbound links.** This position is supported by “[t]he results of the assessment, and the corresponding transmitting station identifier, are stored in a local data base 360 within each receiving station.” (Hulyalkar, para. [0027]).

Claim 1 recites “combin[ing] routing information for each transceiver node and the congestion report into a plurality of node routing and congestion reports, [and] transmit[ing] one of the plurality of node routing and congestion reports to each transceiver node based on the routing information.” **Therefore, the congestion report includes quality assessments for all of the paths (e.g., 2-1, 3-1, 4-1, 2-3, 2-4, 2-5, 3-4, 3-5 etc.).** Hulyalkar does not disclose, teach, or suggest the route management module is configured to transmit one of the plurality of node routing and congestion reports to each transceiver node based on the routing information.

In addition, Claim 1 transmits the node routing and congestion reports to each transceiver node based on the routing information. Hulyalkar does not disclose, teach, or suggest transmitting node routing and congestion reports based on routing information. Further,

Hulyalkar does not disclose, teach, or suggest the congestion metric information is based on a monitoring signal of a processor buffer availability.

If the Examiner maintains the rejections of the claims under 35 U.S.C. § 103, the Applicants respectfully request clarification on how the cited sections of the references disclose, teach, or suggest the above-mentioned claim limitations and that the Examiner provide a more detailed reasoning to support the legal conclusion of obviousness. See KSR Int'l v. Teleflex, 550 U.S. 398, 127 S.Ct. 1727, 1738 (2007) (“[T]here must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.”)(citing In re Kahn, 441 F.3d 977, 988 (Fed. Cir. 2006)).

Cain and Billhartz do not cure the deficiencies of Hulyalkar noted above with respect to independent Claim 1.

The Applicants respectfully submit that these references, alone or in combination, do not render obvious that which is recited in independent Claim 1. Claims 2-3, and 7 depend from independent Claim 1 and are allowable for at least the same reasons as independent Claim 1. See 35 U.S.C. § 112 ¶ 4.

Accordingly, the Applicants request withdrawal of the rejections of Claims 1-3 and 7 under 35 U.S.C. § 103(a).

Independent Claims 8 and 16

As stated in the 35 U.S.C. § 103 legal standard section, the Examiner must comply with the all claim limitations standard to establish a *prima facie* basis to deny patentability to the claimed invention under 35 U.S.C. § 103.

Claims 8 and 16 are in independent form and recite “generating congestion metric information based on the link utilization,” “combining the congestion metric information with routing information” and “transmitting the congestion metric information and routing

information.” In Claims 8 and 16, the data cells transmit routing information and the congestion metric information at the same time, which is apparent by the language “combining the congestion metric information with routing information.” The congestion metric information can advantageously use the resources dedicated to the routing updates to deliver the congestion metric information.

In regards to the generating congestion metric information based on the link utilization and combining routing information and congestion information limitations of independent Claims 8 and 16 listed above, the Examiner relies upon Hulyalkar and cites various sections (e.g., paras. [0009], [0010], [0026-0030], and [0033-0038]) of Hulyalkar in support of this reliance. The Applicants have examined these sections of Hulyalkar (and Hulyalkar in general), along with the Examiner’s arguments, and respectfully disagree with the Examiner’s position with respect to Hulyalkar.

Independent Claims 8 and 16 are materially different than the Hulyalkar reference. As an example, the Examiner cites paragraph [0028] of Hulyalkar for the position that Hulyalkar discloses generating congestion metric information based on the link utilization and the combining routing information and congestion information limitations of Claims 8 and 16. The Examiner stated:

Cain fails to mention ‘a route management module configured to combine the congestion metric information generated by the plurality of transceiver nodes into a congestion report; the route management module configured to combine routing information for each transceiver node and the congestion report into a plurality of node routing and congestion reports, the route management module is configured to transmit one of the plurality of node routing and congestion reports to each transceiver node based on the routing information’; the data cell includes ‘routing information’ and wherein the congestion metric information is base on comparing cell counts against a total capacity of each link, a monitoring signal of a processor buffer availability, and a monitoring signal of priority queues capacity’.

However, Hulyalkar, which is an analogous art teaches, a route management module configured to combine the congestion metric information generated by the plurality of transceiver nodes into a congestion report; the route management module configured to combine routing information for each transceiver node and the congestion report into a plurality of node routing and congestion reports, the route management module is configured to transmit one of the plurality of node routing and congestion reports to each transceiver node based on the routing information; the data cell includes 'routing information' (= each station maintains local database of results of quality assessment for each path to each other station; the organization of network quality assessment measurement as a matrix; and the matrix includes transmitting stations and receiving stations identifiers and reported quality assessment, see Pars. [0009-0010, 0026-30 and 00337-38]. (Office Action dated August 29, 2008, pages 3-4).

However, these sections of Hulyalkar (and Hulyalkar in general) do not disclose, teach, or suggest “generating congestion metric information based on the link utilization,” “combining the congestion metric information with routing information” and “transmitting the congestion metric information and routing information.”

As stated in paragraph [0028] of Hulyalkar cited by the Examiner, the Hulyalkar reference discloses “[e]ach station will maintain in its local data base 360, a quality assessment for each path to each other station. For example, station 1 will maintain the quality assessments for paths 2-1, 3-1, 4-1, etc.” In other words, station 1 maintains a quality assessment for any direct inbound link from another station but does not have any data regarding the quality assessment for paths 1-2, 1-3, 1-4, 2-3, 2-4, 2-5, 3-4, etc. **The Applicants respectfully submit that an examination of Figure 5 of Hulyalkar shows that each station only has quality assessment data for the inbound links.** This position is supported by “[t]he results of the assessment, and the corresponding transmitting station identifier, are stored in a local data base 360 within each receiving station.” (Hulyalkar, para. [0027]).

Claims 8 and 16 recite “generating congestion metric information based on the link utilization,” “combining the congestion metric information with routing information” and

“transmitting the congestion metric information and routing information.” As recited in Claims 8 and 16, the method measures by the transceiver node, “the utilization of each of the links to each of its neighbors.” **Therefore, generating congestion metric information based on the link utilization includes quality assessments for all of the paths (e.g., 2-1, 3-1, 4-1, 2-3, 2-4, 2-5, 3-4, 3-5, etc.).** Since Hulyalkar only discloses quality assessment data from the inbound links and does not combine quality assessment data with routing information, Hulyalkar does not disclose, teach, or suggest the above-referenced limitations of independent Claims 8 and 16.

If the Examiner maintains the rejections of the claims under 35 U.S.C. § 103, the Applicants respectfully request clarification on how the cited sections of the references disclose, teach, or suggest the above-mentioned claim limitations and that the Examiner provide a more detailed reasoning to support the legal conclusion of obviousness. See KSR Int’l v. Teleflex, 550 U.S. 398, 127 S.Ct. 1727, 1738 (2007) (“[T]here must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.”)(citing In re Kahn, 441 F.3d 977, 988 (Fed. Cir. 2006)).

The Applicants respectfully submit that these references, alone or in combination, do not render obvious that which is recited in independent Claims 8 and 16. Claims 9-15 and 17-22 depend variously from independent Claims 8 and 16 and are allowable for at least the same reasons as independent Claims 8 and 16. See 35 U.S.C. § 112 ¶ 4.

Accordingly, the Applicants request withdrawal of the rejections of Claims 8-22 under 35 U.S.C. § 103(a).

* * *

Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

Further, the Applicants respectfully put the Patent Office and all others on notice that all arguments, representations, and/or amendments contained herein are only applicable to the present Application and should not be considered when evaluating any other patent or patent application including any patents or patent applications which claim priority to this patent Application and/or any patents or patent applications to which priority is claimed by this patent Application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 18-1722. If any extensions of time are needed for timely acceptance of papers submitted herewith, the Applicants hereby petition for such extension under 37 C.F.R. § 1.136 and authorize payment of any such extensions fees to Deposit Account No. 18-1722.

Respectfully submitted,

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